

Journal of Physics: Conference Series 2014 vol.567 N1

Oscillations of a homogeneous gas and drift particles in an external wave field an open tube

Tkachenko L., Zaripov R.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. The dynamics of a particle and a homogeneous gas in the external wave field open tube by different values of amplitude of piston travel at the first eigenfrequencies in the shock- free mode are experimentally investigated. It is found the velocity distribution of the gas flow in the external the wave field open tube in different cross sections at various amplitudes of piston travel. The dependence of the coordinates of the particle along the axis the outside of the tube at on the time at resonance frequency are obtained. The comparison of velocity flow of the gas and particle drift in the external the wave field open tube is performed.

<http://dx.doi.org/10.1088/1742-6596/567/1/012038>
